

CLAIMS

What is claimed is:

1. A device for controlling flow of fluid through a conduit, said device comprising:
 - a body defining a chamber;
 - an inlet positioned within said body in fluid communication with said chamber;
 - an outlet positioned within said body in fluid communication with said chamber;
 - an opening positioned in said body providing access to said chamber;
 - a frame sized to pass through said opening for positioning within said chamber, said frame being adapted to support a plurality of flow restricting elements within said chamber;
 - at least one flow restricting device mounted on said frame; and
 - a plug sized to sealingly fit within said opening for retaining said frame within said chamber.
2. A device according to Claim 1, wherein said flow restricting element comprises an orifice plate mounted on said frame, said orifice plate having an orifice therethrough for limiting flow through said device to a predetermined flow rate.
3. A device according to Claim 2, wherein said orifice plate is removably attachable to said frame.
4. A device according to Claim 1, wherein said flow restricting device is a check valve comprising:
 - a seat;

a valve closing element movable into and out of sealing engagement with said seat; and

a biasing member engaging said valve closing element for biasing said valve closing element into engagement with said seat.

5. A device according to Claim 4, further comprising:

an orifice plate mounted on said frame, said orifice plate having an orifice therethrough for limiting flow through said device to a predetermined flow rate, said orifice plate being positioned between said check valve and said outlet and adjacent to said valve closing element; and

a biasing element positioned between and engaging said orifice plate and said valve closing element for biasing said valve closing element into sealing engagement with said seat.

6. A device according to Claim 5, wherein said orifice plate is removably attachable to said frame.

7. A device according to Claim 1, further comprising a filter element mounted on said frame and positioned between said inlet and said flow restricting device.

8. A device according to Claim 7, further comprising:

a second opening in said body in fluid communication with said inlet and said chamber; and

a second plug sized to sealingly fit within second opening, said second plug being removable to permit fluid to flow from said inlet, through said

chamber and out of said opening thereby flushing said filter element.

9. A device for controlling flow of fluid through a conduit, said device comprising:
 - a body defining a chamber;
 - an inlet positioned within said body in fluid communication with said chamber;
 - an outlet positioned within said body in fluid communication with said chamber;
 - a check valve positioned within said chamber between said inlet and said outlet and configured to permit flow only from said inlet, through said chamber and through said outlet;
 - a filter element positioned within said chamber between said inlet and said outlet; and
 - an orifice plate positioned within said body between said inlet and said outlet, said orifice plate having an orifice therethrough for limiting flow through said device at a predetermined flow rate.

10. A device according to Claim 9, wherein said filter element is disposed between said inlet and said check valve.

11. A device according to Claim 10, wherein said orifice plate is positioned between said check valve and said outlet.

12. A device according to Claim 9, wherein said check valve comprises:

- a valve seat;
- a valve closing element movable into and out of engagement with said valve seat, said orifice plate

being positioned adjacent to said valve closing element; and

a biasing member for biasing said valve closing element into engagement with said valve seat, said biasing member being positioned between and engaging both said orifice plate and said valve closing element.

13. A device according to Claim 9, further comprising:

an opening positioned in said body providing access to said chamber, said opening being sized to permit removal and insertion of said check valve and said orifice plate from said chamber; and

a plug sized to sealingly fit within said opening and retain said check valve and said orifice plate within said chamber.

14. A device according to Claim 13, further comprising a frame positionable within said chamber, said check valve, said filter element and said orifice plate being mountable on said frame, said frame being removable from said chamber through said opening, said check valve, said orifice plate and said filter element being removable from said chamber with said frame.

15. A device according to Claim 14, wherein said orifice plate is removably mounted on said frame.

16. A device according to Claim 14, wherein said filter element is positioned surrounding said frame.

17. A device according to Claim 10, further comprising:

an opening in said body in fluid communication with said inlet and said chamber; and a plug sized to sealingly fit within said opening, said plug being removable to permit fluid to flow from said inlet, through said chamber and out of said opening thereby flushing said filter element.